

## **Appendix S:      Hazardous Materials Business Plan**



5161 Ellsworth Street, San Diego, CA 92110

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February 5, 2001

**Mr. John Kolb, R.E.H.S**  
**Environmental Health Specialist III**  
Department of Environmental Health  
Hazardous Materials Division  
P.O. Box 129261  
San Diego, CA 92112-9261

**Subject:** Submittal of the Hazardous Materials Business Plan for the PG&E Dispersed  
Generating Chula Vista Peak Power Generating Plant

Dear John:

On behalf of PG&E Dispersed Generating, LLC, enclosed is a copy of the Hazardous Materials Business Plan for the Chula Vista Peak Power Generating Plant. This Business Plan is submitted for your review and inclusion in the Public Risk Management Plan (RMP). It is anticipated that this Business Plan will be attached to the RMP for public Review.

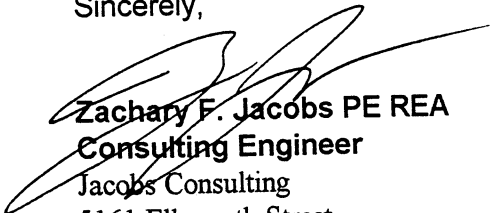
As you know, the facility is not currently constructed or operational. Therefore, many of the PG&E-DG employees and operators have not been identified as of this date. During construction the following individuals and phone numbers are provided for Emergency Notification purposes:

Mr. Zachary F. Jacobs, Jacobs Environmental Consulting	619-275-2265
Mr. Fred Jaeger, Jaeger Engineering (Construction Management)	619-921-6953
	858-259-0300
Mr. Gary Veerkamp (PG&E-DG Construction Manager)	415-288-5678

Note: This Business Plan will be completely updated with correct Emergency Coordinator names and phone numbers prior to the arrival of Ammonia on-site. Also, the contracted emergency response company will be named and a phone number will be provided.

We appreciate your time and assistance with this program. If you have any questions, please don't hesitate to call me at 619-275-2265.

Sincerely,

  
**Zachary F. Jacobs PE REA**  
**Consulting Engineer**  
Jacobs Consulting  
5161 Ellsworth Street  
San Diego, CA 92110



5161 Ellsworth Street, San Diego, CA 92110

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# **Hazardous Materials Business Plan**

For:

Pacific Gas and Electric – Dispersed Generating LLC  
Chula Vista Peak Power Generation Plant

Located at:

3497 Main Street, Chula Vista, CA 91911

Note:

Final Business Plan  
To be Submitted Prior to  
Ammonia Delivery

February 5, 2001

OFFICE USE ONLY
REVIEWED BY: _____
DATE: _____

## HAZARDOUS MATERIALS BUSINESS PLAN

Date January 31, 2001

### II. EMERGENCY RESPONSE PLAN

H# 39211

Dunn and Breckinridge # 3514

1. Business Name PG&E Dispersed Generating Company, LLC
2. Business Site Address Site Address: 3497 Main Street, Chula Vista, CA 91911
3. Business Telephone To Be Determined 24-Hour To Be Determined
4. Brief description of product manufactured and/or service provided  
Natural Gas-Fired Combustion Turbine Peak Load Electrical Power Plant.

5. Evacuation Procedures:

This is an unmanned facility. At a maximum, there would be three individuals involved with filling the Ammonia Tank. During a major spill event or fire evacuation will be necessary for all persons that are not properly trained and do not have the proper personal protective equipment. All personnel will exit through the front gate.

6. Notification Procedures:

In the event of a release or threatened release of a hazardous material the following agencies are to be notified.

- |   |   |
|---|---|
| A. Local Emergency Response Agencies              | <u>Phone #</u>                            |
| B. Hazardous Materials Division                   | <u>911</u>                                |
| C. State Office of Emergency Services             | <u>338-2222 (911 after working hours)</u> |
|   | <u>(800) 852-7550</u>                     |
| Contracted Emergency Responder – To Be Determined | <u>(916) 427-4341</u>                     |

Name of person(s) responsible for completing notifications To Be Determined

Describe notification procedures: \_\_\_\_\_

7. Emergency Procedures:

Main concerns are fire and ammonia spills. If there is a fire alarm or an ammonia sensor alarm, the Remote Operator will make initial emergency response notifications to local responders. The Remote Operator will also notify the PG&E-DG regional Emergency Coordinator and the clean-up contractor if it is an ammonia-related event.

39211

Date 1/31/01

I. INVENTORY

SEE ATTACHED INVENTORY FORM CODE TABLE FOR STORAGE CODES AND HAZARDOUS CATEGORIES.

ITEM

001

AQUEOUS AMMONIA - 19% Ammonia with water

15

CAS NO.

AMMONIA

7664-41-7

TOTAL YEARLY  
AMOUNT

12,000

124

- 1 - POUNDS
- 2 - GALLONS
- 3 - TONS
- 4 - MILLILITERS
- 5 - MILLIGRAMS
- 6 - CUBIC FEET

UNITS

2

STORAGE

AS4

HAZARD  
CATEGORIES

04

CONF

04

TOXIC GAS

141

MSDS

142

106  
---CHECK IF APPROPRIATE---  
(OFFICE USE ONLY)

ITEM

002

VARIOUS Lubricating Oils

15

CAS NO.

8002-05-9

TOTAL YEARLY  
AMOUNT

110

124

- 1 - POUNDS
- 2 - GALLONS
- 3 - TONS
- 4 - MILLILITERS
- 5 - MILLIGRAMS
- 6 - CUBIC FEET

UNITS

2

STORAGE

DMS

HAZARD  
CATEGORIES

01

CONF

04

TOXIC GAS

141

MSDS

142

106  
---CHECK IF APPROPRIATE---  
(OFFICE USE ONLY)

ITEM

003

ETHYLENE GLYCOL - ANTIFREEZ

15

CAS NO.

107-21-1

TOTAL YEARLY  
AMOUNT

110

124

- 1 - POUNDS
- 2 - GALLONS
- 3 - TONS
- 4 - MILLILITERS
- 5 - MILLIGRAMS
- 6 - CUBIC FEET

UNITS

2

STORAGE

DMS

HAZARD  
CATEGORIES

04

CONF

99

TOXIC GAS

141

MSDS

142

106  
---CHECK IF APPROPRIATE---  
(OFFICE USE ONLY)

Date January 31, 2001

H# 39211

HAZARDOUS MATERIALS BUSINESS PLAN

III. EMPLOYEE TRAINING DESCRIPTION

OFFICE USE ONLY
REVIEWED BY: _____
DATE: _____

The following describes the employee training provided for all employees that handle hazardous substances

1. Training Topic - Procedures for handling hazardous materials, including hazardous wastes:

Persons Trained: Regional Operators (Emergency Coordinators and Alternates)

Training Time: 4 hours Refresher Frequency: Annually Refresher Time: 1 hour

Training Content:

Identify hazardous materials in the workplace, proper procedures for storage and handling. Proper methods for labeling and disposal. Hazardous materials and waste record keeping. MSDS understanding. Procedures for loading of aqueous ammonia into tanks.

2. Training Topic - Procedures for coordination with emergency response agencies:

Persons Trained: Regional Operators (Emergency Coordinators and Alternates)

Training Time: 4 hours Refresher Frequency: Annually Refresher Time: 1 hour

Training Content: Review of emergency response procedures including tabletop exercises to be performed in conjunction with the local responders and the chemical clean-up contractor. This will include many items contained in the Emergency response plan and other subjects contained in the facility Risk Management Plan (RMP) Technical Document. This will include individual responsibilities of all people involved as well as the Incident Command System (ICS). This will ensure that the EC will understand the cooperation that will be required with local responders.

3. Training Topic - Use of emergency response equipment and materials under the business control:

Persons Trained: Regional Operators (Emergency Coordinators and Alternates)

Training Time: 4 hours Refresher Frequency: Annually Refresher Time: 1 hour

Training Content:

This training will include inspection, maintenance, and proper usage of personal protective equipment and other emergency response equipment on-site (when applicable).

4. Training Topic - Emergency Response Plan implementation:

Persons Trained: Regional Operators (Emergency Coordinators and Alternates)

Training Time: 4 hours Refresher Frequency: Annually Refresher Time: 1 hour

Training Content:

This training will include a review of all emergency response plan actions that are required to fully implement the ER Plan. It will also center on ensuring that all of the elements of the ER plan are in-place and operational. A feedback loop is incorporated in this training that ensures that modification to the plan get into the original document and all ancillary documents.

# SITE MAP

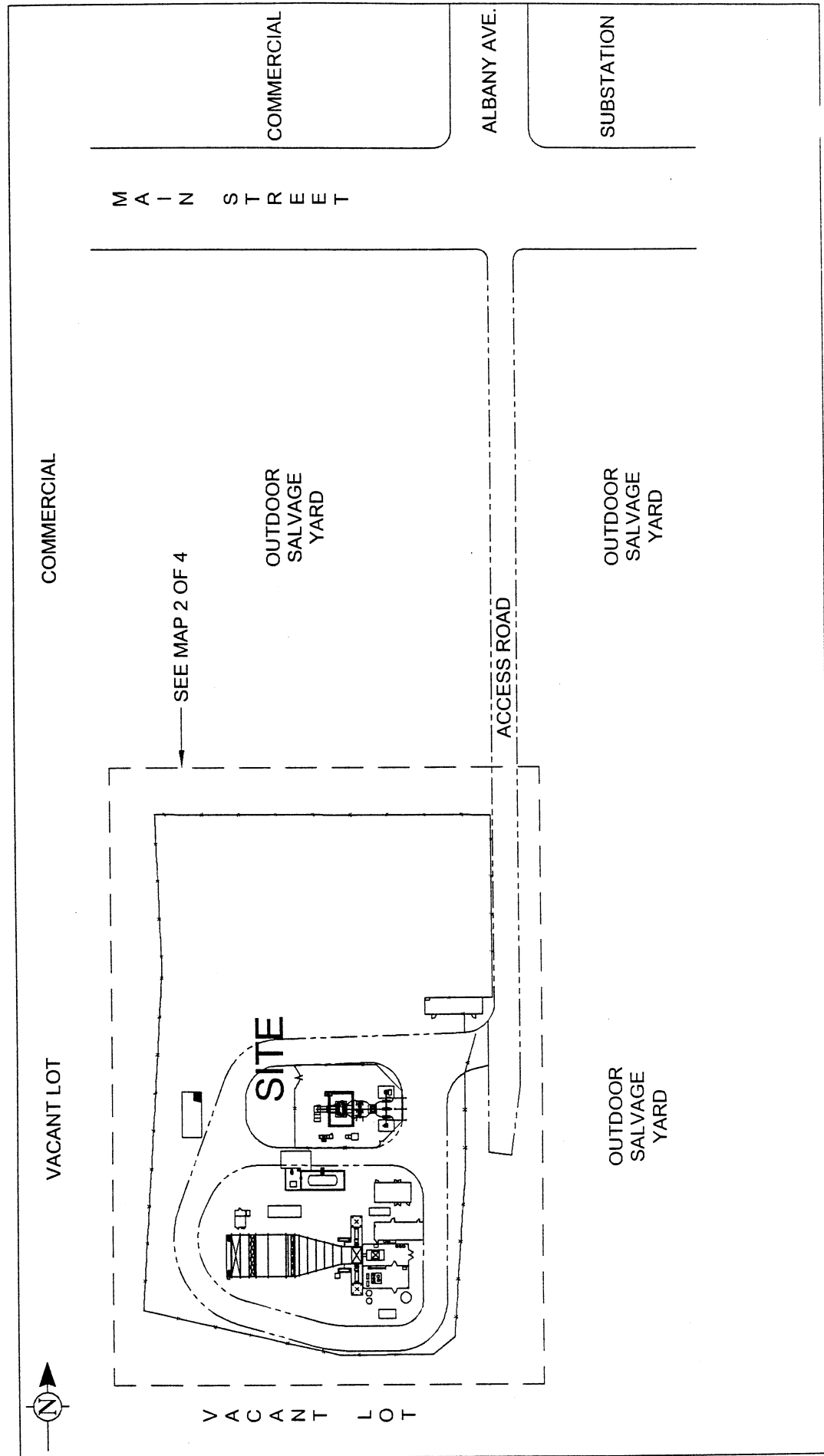
H# 39211

THOMAS BROS. COORDINATE 1330-E5 1998

(Page 1 of 4)

BUSINESS NAME Chula Vista Peak Power Generating Plant DATE Jan. 26, 01

BUSINESS ADDRESS 3497 Main St., Chula Vista, CA ZIP CODE 91911



# SITE MAP

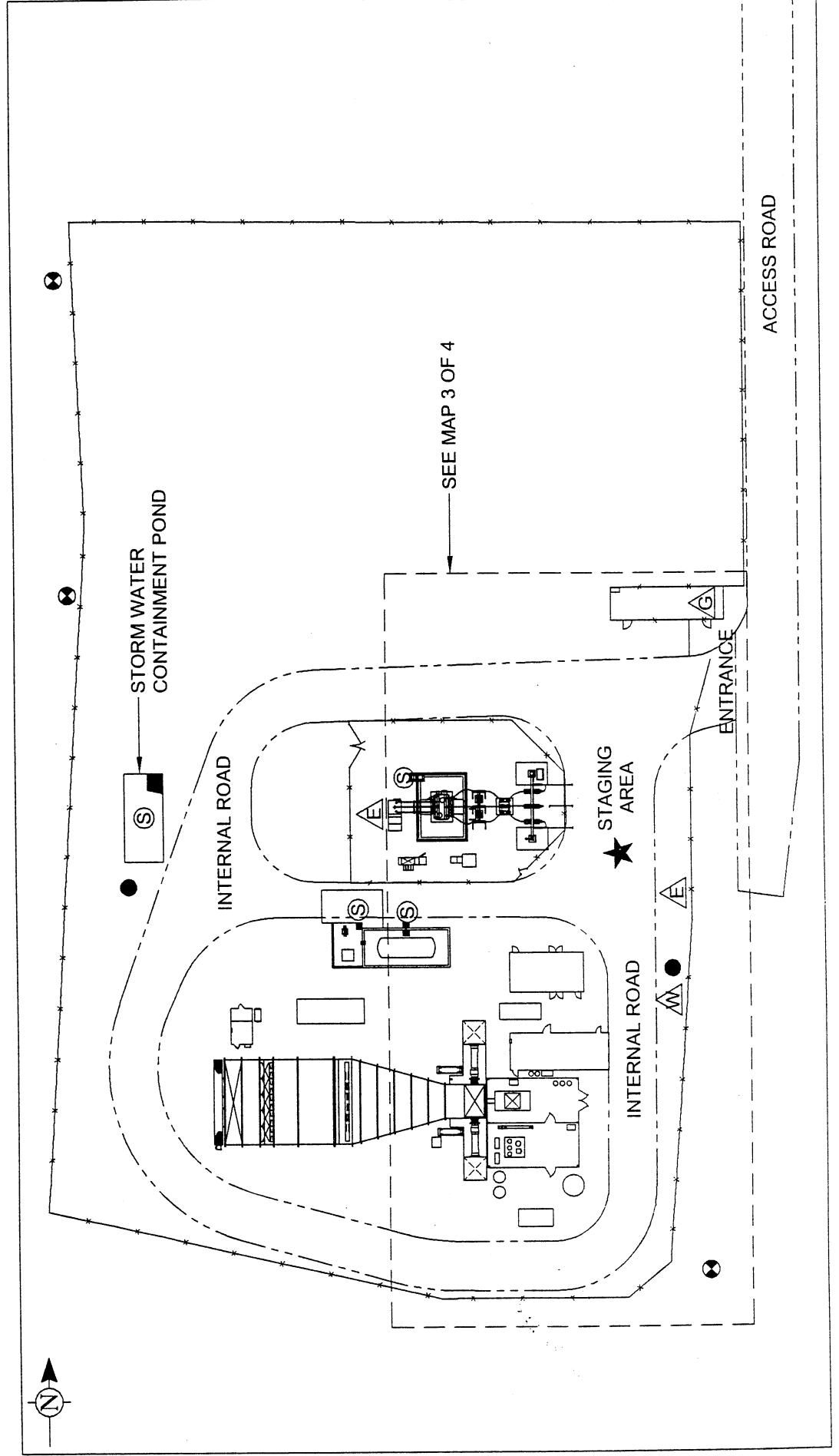
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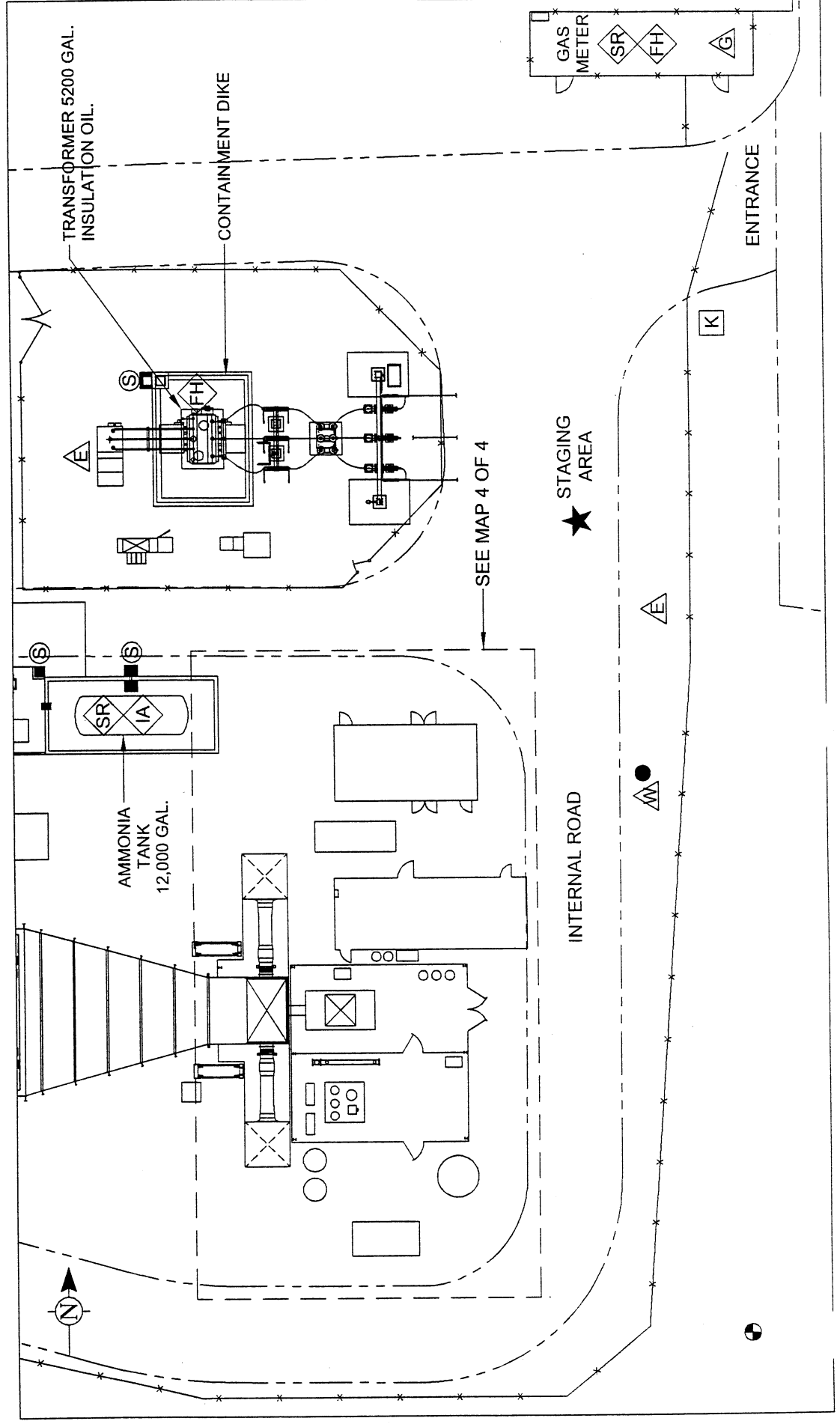
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(Page 3 of 4)

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# SITE MAP

H# 39211

THOMAS BROS. COORDINATE 1330-E5 1998

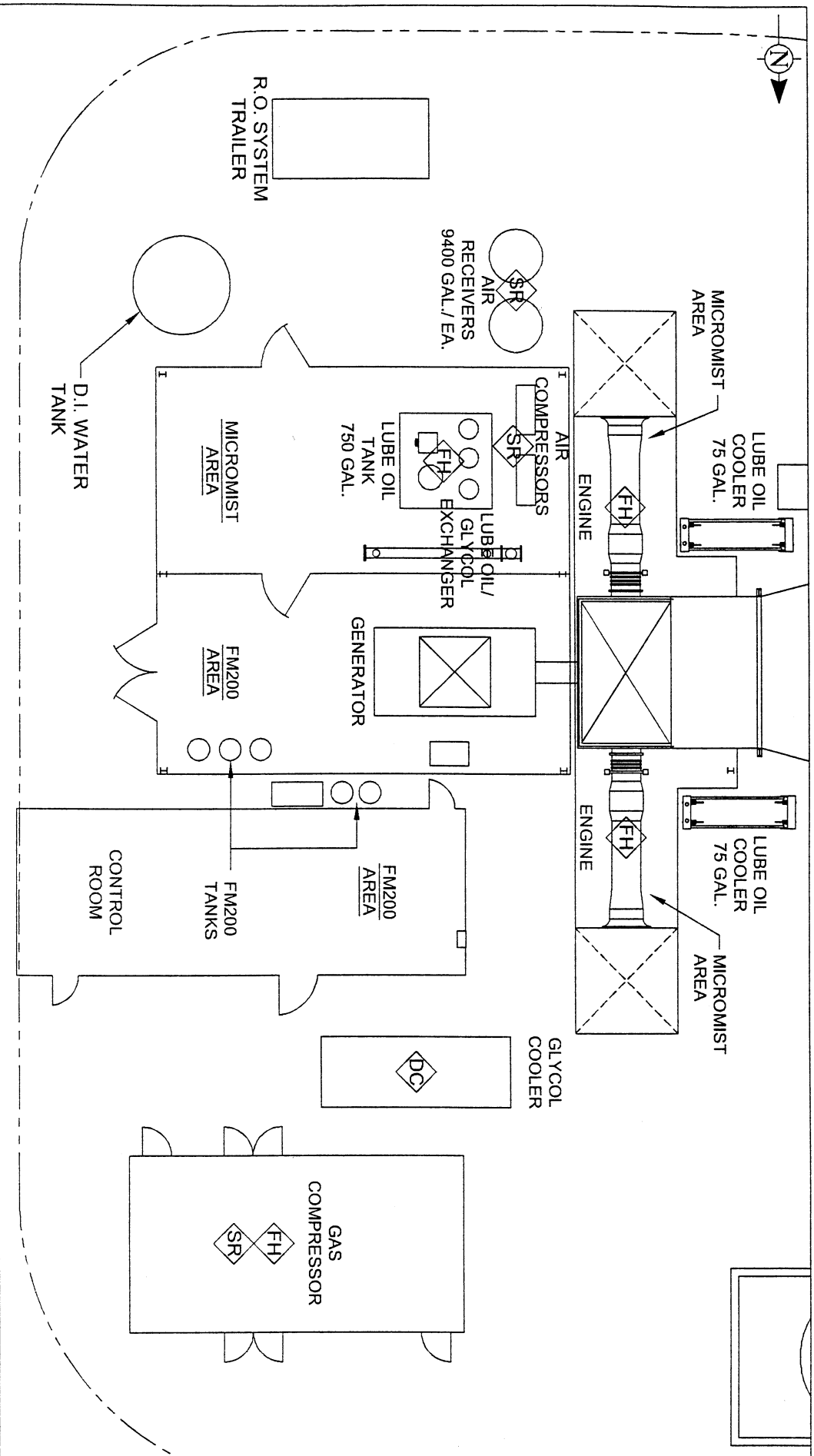
(Page 4 of 4)

BUSINESS NAME Chula Vista Peak Power Generating Plant

DATE Jan. 26, 01

BUSINESS ADDRESS 3497 Main St., Chula Vista, CA

ZIP CODE 91911



**IV. GENERAL INFORMATION**  
**EMERGENCY NOTIFICATION PHONE ROSTER**

EMERGENCY (TYPE)	ORGANIZATION	PHONE*	REPORTING REQUIREMENTS	REQUIRED NOTIFICATION PERIOD
Injury (any)	(Hospital) <u>Scripps Memorial 619-691-7290</u> (Nearest hospital capable of handling fire and/or chemical emergency) (Paramedics and/or Ambulance Service) <u>Five Deg</u>	911*	1. Name and telephone of reporter.	Immediately or within 24 hours.
Poisoning	Poison Control	(619) 543-6000*	2. Name and address of facility.	
Occupational Accident or Exposure (Notification)	OSHA (Occupational Safety & Health)	(619) 537-5534		
Fire/Explosion	(Fire) <u>Chula Vista Fire Dept</u> (Name of your local Fire District) (Police/Sheriff) <u>Chula Vista Police Dept</u> (Name of Local Fire/Police Agency) + (Fire) + San Diego County Hazardous Materials Division (1) + California Office of Emergency Services + National Response Center (U.S. Coast Guard) - (Notify only if required by California OES)	911* 911* 911* (619) 338-2222 (800) 852-7550* (800) 424-8802	3. Time and type of incident (fire, chemical, etc.). 4. Name and quantity of material(s) included to the extent known. 5. The extent of injuries if any.	Agencies may request a follow-up report in writing.
Hazardous Material Spill/Release Outside Facility			6. Possible hazards to human health or the environment, outside the facility.	Consult each agency for their reporting requirements.
In addition to above if spill reaches: Storm Drain/Creeks River/Bays Sanitary Sewer Gas/Gas Release into Atmosphere Underground Storage Tank Leak/Spill	San Diego Regional Water Quality Control Board  (Sewer District) <u>SDMIWP</u> (Name of Sewer District Serving your Facility) San Diego Air Pollution Control District  (Fire)  (Emergency)  San Diego County Hazardous Materials Division San Diego Regional Water Quality Control Board	(619) 467-2952  (Phone) (619) 694-3307 911*  (619) 338-2222 (619) 467-2952		
Spill Cleanup (Contractor)	ADDITIONAL RESPONSE RESOURCES (Company Name) <u>To Be Determined</u> (Company of your choosing)	TBD	Check with contractor for his requirements.	As soon as possible
Water District	(Utility Name) <u>Chula Vista</u>		1, 2, and 3 above.	or
Electrical/Gas Utility	San Diego Gas & Electric (SDG&E)	(619) 234-6242*	1, 2, and 3 above	As situation requires
Emergency Information	Chicrep	<u>619-543-6000</u> <u>619-543-6000</u>		

\* Denotes 24-Hour Number + Required notification if hazardous materials emergency extends outside of the facility or requires an evacuation of public areas.

(1) After business hours use 911 to contact the County Environmental Health Department in case of emergency only.

H#

## IV. GENERAL INFORMATION

DATE: 01/31/01

## EMERGENCY EQUIPMENT

INSTRUCTIONS: In the blank form provided, describe the safety, spill response, communication and structural containment equipment you have in place at your facility for use in emergency situations. If practical, report the equipment according to individual job, shop or work activity area within our facility. If applicable, include the elements listed in the legend.

Personnel Protective & Safety Equipment		Emergency Response Equipment	Communications Equipment	Structural Equipment
Aprons	Cartridge Respirators	Fire Extinguishers (Type A, B, C, D)	Telephones	Burns & Dikes
Gloves	Self-Contained Breathing Apparatus (SCBA)	Fire Hoses	Intercoms	Tanks (Emergency)
Coats	First Aid Kits	Eye Wash, Safety Showers	Portable Radio(s)	Over pack Drum(s)
Chemical Suits	Exhaust Hoods	Chemical Monitoring Equipment (Type)	Verbal	Containment Vaults
Boots	First Aid Stations	Chemical Alarms - Bells, etc.		Blind Sumps
Safety Glasses	Chemical Antidotes	Chemical Spill Equipment - Absorbents, Neutralizers, Sand, Leak Repair Kits (Chlorine), Underground Tank Leak Detection Monitors		
Faceshield				
Hard Hats				

LOCATION SHOP OR AREA	PERSONNEL PROTECTIVE & SAFETY EQUIPMENT	EMERGENCY RESPONSE SPILL EQUIPMENT	COMMUNICATIONS EQUIPMENT	STRUCTURAL EQUIPMENT	INSPECTION FREQUENCY
Loading/Tank Area	Chemical Suits (Leakage) First Aid Respirators	Eye Wash Absorbents Absorbents	Telephones Cell phones Radio	Burns Sumps Vaults	2-4 weeks

## EXAMPLE

LOCATION SHOP OR AREA	PERSONNEL PROTECTIVE & SAFETY EQUIPMENT	EMERGENCY RESPONSE SPILL EQUIPMENT	COMMUNICATIONS EQUIPMENT	STRUCTURAL EQUIPMENT	INSPECTION FREQUENCY
LAINT SHOP	CARTRIDGE RESPIRATORS, .....	PAINE EXTINGUISHER	TELEPHONE -	NONE	MONTHLY
	EXHAUST HOOD				

DATE \_\_\_\_\_

Submit to HMD

E58

(OFFICE USE ONLY)  
ESTAB NUMBER

HAZARDOUS MATERIALS BUSINESS PLAN

II. EMERGENCY RESPONSE PLAN

II	3	9	2	1	1	
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2

EMERGENCY COORDINATOR INFORMATION

PLEASE LIST THE NAME, TITLE/POSITION AND PHONE NUMBERS (OFFICE AND HOME/24-HR) OF THE EMERGENCY COORDINATOR AND ALTERNATES WHO ARE QUALIFIED AND AUTHORIZED TO ASSIST EMERGENCY RESPONSE PERSONNEL (FOR EXAMPLE, FIRE PERSONNEL) IN THE EVENT OF AN EMERGENCY.

During construction the following individuals and phone numbers are provided for Emergency Notification and Coordination purposes:

Mr. Zachary F. Jacobs, Jacobs Environmental Consulting  
619-275-2265 cell 619-933-9701

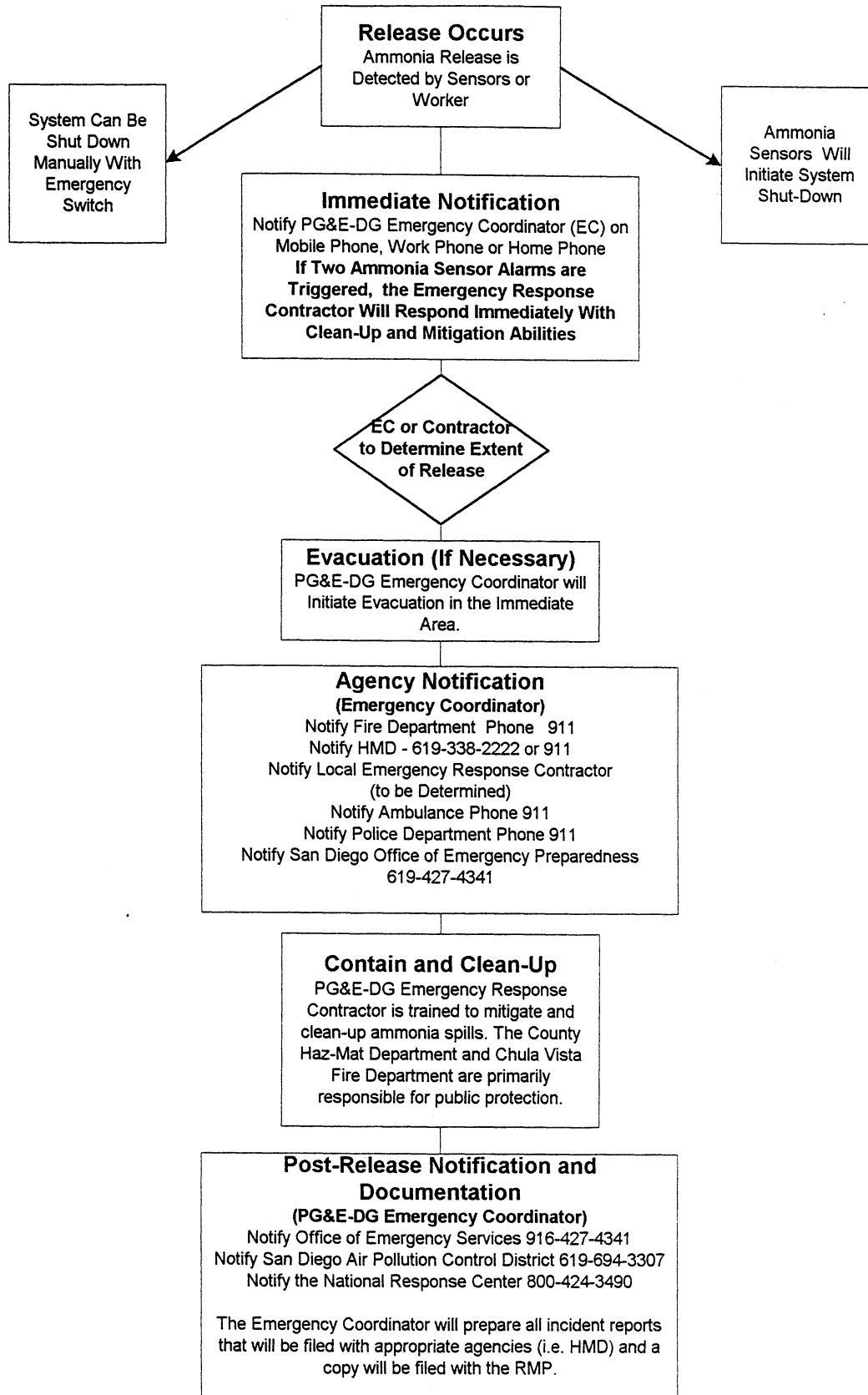
Mr. Fred Jaeger, Jaeger Engineering (Construction Management)  
619-921-6953 or 858-259-0300

Mr. Gary Veerkamp (PG&E-DG Construction Manager)  
415-288-5678

**Note:**

This Business Plan will be completely updated with correct Emergency Coordinator names and phone numbers prior to the arrival of Ammonia on-site. Also, the contracted emergency response company will be named and a phone number will be provided.

## Emergency Response Flow Chart



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Please reduce your browser font size for better viewing and printing.

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**MSDS****Material Safety Data Sheet**

From: Mallinckrodt Baker, Inc.  
222 Red School Lane  
Phillipsburg, NJ 08865



24 Hour Emergency Telephone: 800-859-2151  
CHEMTREC: 1-800-424-9300

National Response in Canada  
CANUTEC: 613-896-6568

Outside U.S. and Canada  
Chemtrec: 202-453-7618

NOTE: CHEMTREC, CANUTEC and National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

All non-emergency questions should be directed to Customer Service (1-800-562-2537) for assistance.

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## Ammonia Solution, Strong

MSDS Number: A5472 --- Effective Date: 10/01/97

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### 1. Product Identification

**Synonyms:** Ammonia Aqueous; Aqua Ammonia; Ammonia TS

**CAS No.:** Not applicable to mixtures.

**Molecular Weight:** Not applicable to mixtures.

**Chemical Formula:** Not applicable to mixtures.

**Product Codes:** 5905, 9724, 9726

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### 2. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
Ammonia	7664-41-7	27 - 31%	Yes
Water	7732-18-5	69 - 73%	No

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### 3. Hazards Identification

#### Emergency Overview

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**POISON! DANGER! CORROSIVE ALKALINE SOLUTION. CAUSES BURNS TO ANY AREA OF CONTACT. HARMFUL IF SWALLOWED, INHALED OR ABSORBED THROUGH SKIN.**

J.T. Baker SAF-T-DATA<sup>(tm)</sup> Ratings (Provided here for your convenience)

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--  
Health Rating: 3 - Severe (Poison)  
Flammability Rating: 1 - Slight  
Reactivity Rating: 2 - Moderate  
Contact Rating: 3 - Severe (Corrosive)  
Lab Protective Equip: GOGGLES & SHIELD; LAB COAT & APRON; VENT HOOD;  
PROPER GLOVES  
Storage Color Code: White Stripe (Store Separately)

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### **Potential Health Effects**

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Ammonia is very alkaline and reacts corrosively with all body tissues.

#### **Inhalation:**

Corrosive. Extremely destructive to tissues of the mucous membranes and upper respiratory tract. Symptoms may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea and vomiting. Inhalation may be fatal as a result of spasm inflammation and edema of the larynx and bronchi, chemical pneumonitis and pulmonary edema.

#### **Ingestion:**

Corrosive. Swallowing can cause severe burns of the mouth, throat, and stomach, leading to death. Can cause sore throat, vomiting, diarrhea.

#### **Skin Contact:**

Dermal contact with alkaline corrosives may produce pain, redness, severe irritation or full thickness burns. May be absorbed through the skin with possible systemic effects.

#### **Eye Contact:**

Corrosive. Can cause blurred vision, redness, pain, severe tissue burns and eye damage. Eye exposure may result in temporary or permanent blindness.

#### **Chronic Exposure:**

Prolonged or repeated skin exposure may cause dermatitis. Prolonged or repeated exposure may cause eye, liver, kidney, or lung damage.

#### **Aggravation of Pre-existing Conditions:**

No information found.

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## **4. First Aid Measures**

#### **Inhalation:**

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

#### **Ingestion:**

If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. Never give anything by mouth to an unconscious person. Get medical attention immediately.

#### **Skin Contact:**



Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Wash clothing before reuse. Thoroughly clean shoes before reuse.

**Eye Contact:**

Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

**Note to Physician:**

DO NOT induce emesis, perform gastric lavage or attempt neutralization after ingestion. Dilution with milk or water may be of benefit. Endoscopic evaluation may be required.

---

## 5. Fire Fighting Measures

**Fire:**

Autoignition temperature: 651C (1204F)

Flammable limits in air % by volume:

lcl: 16; ucl: 25

Not considered to be a fire hazard.

**Explosion:**

Gives off flammable vapors. Vapors may form explosive mixture with air. Closed containers exposed to heat may explode.

**Fire Extinguishing Media:**

Use any means suitable for extinguishing surrounding fire. Water spray may be used to keep fire exposed containers cool. Do not allow water runoff to enter sewers or waterways.

**Special Information:**

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

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## 6. Accidental Release Measures

Approach release from upwind. Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Contain and recover liquid when possible. Carefully neutralize spill with dilute HCl. Collect liquid in an appropriate container or absorb with an inert material (e. g., vermiculite, dry sand, earth), and place in a chemical waste container. Use water spray to cool, absorb, and disperse vapors. Do not use combustible materials, such as saw dust. Do not flush to sewer! US Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities. The toll free number for the US Coast Guard National Response Center is (800) 424-8802

J. T. Baker NEUTRACIT(R)-2 or BuCAIM(R) caustic neutralizers are recommended for spills of this product.

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## 7. Handling and Storage

Store below 25°C. Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Isolate from incompatible substances. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product.

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## 8. Exposure Controls/Personal Protection

### **Airborne Exposure Limits:**

For Ammonia:

- OSHA Permissible Exposure Limit (PEL) - 50 ppm (TWA)
- ACGIH Threshold Limit Value (TLV) 25 ppm (TWA), 35 ppm (STEL).

### **Ventilation System:**

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

### **Personal Respirators (NIOSH Approved):**

If the exposure limit is exceeded, a full facepiece respirator with an ammonia/methylamine cartridge may be worn up to 50 times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. For emergencies or instances where the exposure levels are not known, use a full-facepiece positive-pressure, air-supplied respirator. **WARNING:** Air purifying respirators do not protect workers in oxygen-deficient atmospheres.

### **Skin Protection:**

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

### **Eye Protection:**

Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area.

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## 9. Physical and Chemical Properties

### **Appearance:**

Clear, colorless liquid.

### **Odor:**

Intense, pungent, suffocating odor.

### **Solubility:**

Complete (100%)

**Specific Gravity:**

ca. 0.90 @ 25C/25C

**pH:**

11.6 (1.0N)

**% Volatiles by volume @ 21C (70F):**

100

**Boiling Point:**

No information found.

**Melting Point:**

- 77C (-107F)

**Vapor Density (Air=1):**

0.59 (ammonia gas)

**Vapor Pressure (mm Hg):**

No information found.

**Evaporation Rate (BuAc=1):**

No information found.

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## 10. Stability and Reactivity

**Stability:**

Stable under ordinary conditions of use and storage.

**Hazardous Decomposition Products:**

Burning may produce ammonia, nitrogen oxides.

**Hazardous Polymerization:**

Will not occur.

**Incompatibilities:**

Ammonia (anhydrous) is incompatible with mercury, chlorine, calcium hypochlorite, hydrofluoric acid (anhydrous), bromine pentafluoride, chlorine trifluoride, chloroformates, strong acids, strong oxidizing agents, brass, zinc, aluminum, copper, bronze, most common metals and dimethyl sulfate. Corrosive to copper, zinc and many metal surfaces. Reacts with hypochlorite or other halogen sources to form explosive compounds that are sensitive to pressure or increases in temperature. Reaction with sulfuric acid or other strong mineral acids is exothermic; mixture becomes boiling hot.

**Conditions to Avoid:**

Heat, direct sunlight, incompatibles.

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## 11. Toxicological Information

For Ammonia: LC50 inhalation rat 2000 ppm/4H. Investigated as a tumorigen and mutagen.

-----\Cancer Lists\-----			
Ingredient	---NTP Carcinogen---		IARC Category
	Known	Anticipated	

Ammonia (7664-41-7)

No

No

None

Water (7732-18-5)

No

No

None

---

## 12. Ecological Information

**Environmental Fate:**

No information found.

**Environmental Toxicity:**

No information found.

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## 13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a RCRA approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

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## 14. Transport Information

**Domestic (Land, D.O.T.)****Proper Shipping Name:** AMMONIA SOLUTIONS (WITH 10-35% AMMONIA)**Hazard Class:** 8**UN/NA:** UN2672**Packing Group:** III**Information reported for product/size:** 360LB**International (Water, I.M.O.)****Proper Shipping Name:** AMMONIA SOLUTIONS**Hazard Class:** 8**UN/NA:** UN2672**Packing Group:** III**Information reported for product/size:** 360LB

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## 15. Regulatory Information

-----\Chemical Inventory Status - Part 1\-----

Ingredient

Ammonia (7664-41-7)

Water (7732-18-5)

TSCA

EC

Japan

Australia

Yes

Yes

Yes

Yes

Yes

Yes

Yes

Yes

## -----\Chemical Inventory Status - Part 2\-----

Ingredient	--Canada--			
	Korea	DSL	NDSL	Phil
Ammonia (7664-41-7)	Yes	Yes	No	Yes
Water (7732-18-5)	Yes	Yes	No	Yes

## -----\Federal, State &amp; International Regulations - Part 1\-----

Ingredient	-SARA 302-		-----SARA 313-----	
	RQ	TPQ	List	Chemical Cat.
Ammonia (7664-41-7)	100	500	Yes	No
Water (7732-18-5)	No	No	No	No

## -----\Federal, State &amp; International Regulations - Part 2\-----

Ingredient	CERCLA	-RCRA-		-TSCA-
		261.33	8(d)	
Ammonia (7664-41-7)	100	No	No	No
Water (7732-18-5)	No	No	No	No

Chemical Weapons Convention: No      TSCA 12(b): No      CDTA: No  
 SARA 311/312: Acute: Yes      Chronic: Yes      Fire: No      Pressure: No  
 Reactivity: No      (Mixture / Liquid)

**Australian Hazchem Code: 2P**

**Poison Schedule: S6**

**WHMIS:**

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

## 16. Other Information

**NFPA Ratings:** Health: 3 Flammability: 1 Reactivity: 0

**Label Hazard Warning:**

POISON! DANGER! CORROSIVE ALKALINE SOLUTION. CAUSES BURNS TO ANY AREA OF CONTACT. HARMFUL IF SWALLOWED, INHALED OR ABSORBED THROUGH SKIN.

**Label Precautions:**

Do not get in eyes, on skin, or on clothing.

Do not breathe vapor or mist.

Keep container closed.

Use only with adequate ventilation.

Wash thoroughly after handling.

**Label First Aid:**

If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. Never give anything by mouth to an unconscious person. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes while

removing contaminated clothing and shoes. Wash clothing before reuse. In all cases get medical attention immediately.

**Product Use:**

Laboratory Reagent.

**Revision Information:**

MSDS Section(s) changed since last revision of document include: 1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 13, 16.

**Disclaimer:**

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